

**IN THE SPECIFICATION:**

Page 1, after the title, please insert the following paragraph:

-- This application is a division of prior application serial no. 09/508,458 which is a §371 of International Application No. **PCT/JP99/03794** filed **July 14, 1999**.

**Please replace the paragraph beginning at page 14, line 23, with the following rewritten paragraph:**

Fig. 5A is a photomicrograph of the texture showing a cast structure of a tip end portion ~~A~~ B1 of example (1) of a cast product;

**Please replace the paragraph beginning at page 14, line 25, with the following rewritten paragraph:**

Fig. 5B is a photomicrograph of the texture showing a cast structure of an intermediate portion ~~B~~ B2 of example (1) of the cast product;

**Please replace the paragraph beginning at page 15, line 3, with the following rewritten paragraph:**

Fig. 5C is a photomicrograph of the texture showing a cast structure of a base end portion ~~C~~ B3 of example (1) of the cast product;

**Please replace the paragraph beginning at page 15, line 6, with the following rewritten paragraph:**

Fig. 6A is a photomicrograph of the texture showing a cast structure of a tip end portion A B1 of example (1a) of the cast product;

**Please replace the paragraph beginning at page 15, line 8, with the following rewritten paragraph:**

Fig. 6B is a photomicrograph of the texture showing a cast structure of an intermediate portion B B2 of example (1a) of the cast product;

**Please replace the paragraph beginning at page 15, line 11, with the following rewritten paragraph:**

Fig. 6C is a photomicrograph of the texture showing a cast structure of a base end portion C B3 of example (1a) of the cast product;

**Please replace the paragraph beginning at page 15, line 14, with the following rewritten paragraph:**

Fig. 7A is a photomicrograph of the texture showing a first example of a thermally treated structure in the base end portion C B3 of example (1) of the cast product;

**Please replace the paragraph beginning at page 15, line 17, with the following rewritten paragraph:**

Fig. 7B is a photomicrograph of the texture showing a first example of a thermally treated structure in the base end portion  $\in \underline{B3}$  of example (1a) of the cast product;

**Please replace the paragraph beginning on page 15, line 20, with the following rewritten paragraph:**

Fig. 8A is a photomicrograph of the texture showing a second example of a thermally treated structure in the base end portion  $\in \underline{B3}$  of example (1) of the cast product;

**Please replace the paragraph beginning on page 15, line 23, with the following rewritten paragraph:**

Fig. 8B is a photomicrograph of the texture showing a second example of a thermally treated structure in the base end portion  $\in \underline{B3}$  of example (1a) of the cast product;

**Please replace the paragraph beginning on page 15, line 26, with the following rewritten paragraph:**

Fig. 9A is a photomicrograph of the texture showing a third example of a thermally treated structure in the base end portion  $\in \underline{B3}$  of example (1) of the cast product;

**Please replace the paragraph beginning on page 16, line 3, with the following rewritten paragraph:**

Fig. 9B is a photomicrograph of the texture showing a third example of a thermally treated structure in the base end portion € B2 of example (1a) of the cast product;

**Please replace Table 2 on page 25 with the following rewritten Table 2**

Table 2

Base end portion of cast product	Graphite area rate (%)	Hardness HB	Charpy impact value (J/cm <sup>2</sup> )	Young's modulus (GPa)
Fig. 7A	4.3	153	<del>9.0</del> <u>12.3</u>	180
Fig. 7B	4.3	162	<del>7.0</del> <u>10.0</u>	180
Fig. 8A	4.1	260	7.8	183
Fig. 8B	4.1	285	5.5	183
Fig. 9A	3.0	192	8.0	188
Fig. 9B	2.5	298	2.1	193

**Please insert the following heading on page 34, between lines 16 and 17:**

- - A. Heating test - -

**Please replace the paragraph beginning on page 35, line 6, with the following rewritten paragraph:**

Then, a columnar Fe-based alloy material 5<sub>0</sub> having a diameter D of 50 mm and a length L of 65 mm as shown in Fig. 20 was fabricated from the continuously-cast material, and

thermocouples were embedded into one ~~5b~~ 5a of end surfaces and an outer peripheral surface ~~5c~~ 5b of the material  $5_0$ , respectively. The position of the thermocouple in the end surface 5a is a point E at a depth of 5 mm from the center O of the end surface, while the position of the thermocouple in the outer peripheral surface 5b is a point F at a depth of 5 mm from a bisected position in the direction of a generating line. During heating of the material  $5_0$ , the temperature of the point E is lowest, and this temperature is a criterion in the casting process. Therefore, the point E is defined as a casting reference-temperature point. The point F is a site which is heated to the highest temperature in the induction heating and hence, the point F is defined as the highest-temperature point.

**Please replace the paragraph beginning on page 37, line 13, with the following rewritten paragraph:**

Then, for comparison, an Fe-based alloy material fabricated from the die-cast material was heated to  $740^{\circ}\text{C}$  (the point  $A_1$ ) at an average heating rate set at  $11.74^{\circ}\text{C}/\text{sec}$ , and the relationship between the average temperature of the material and the difference  $\Delta T$  between the temperature at the casting reference-temperature point E and the highest-temperature point F was examined, thereby providing a result shown in Fig. 24. In this case, the maximum value  $\Delta T_{\text{max}}$  of the temperature differences  $\Delta T$  was  $463.4^{\circ}\text{C}$  and hence, the maximum temperature gradient  $T_G$  was  $13.6^{\circ}\text{C}/\text{mm}$ , but cracks were not generated in the material. This is attributed to the absence of a chilled structure in the material.